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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,065	03/12/2004	Ching-Fu Hsueh	10113891	6743
34283	7590	10/28/2005	EXAMINER MAI, ANH T	
QUINTERO LAW OFFICE 1617 BROADWAY, 3RD FLOOR SANTA MONICA, CA 90404			ART UNIT 2832	PAPER NUMBER

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H-A

Office Action Summary	Application No. 10/799,065	Applicant(s) HSUEH ET AL.	
	Examiner Anh T. Mai	Art Unit 2832	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-3, 6-7, and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2, 6, 14, it is not clear a third winding is disposed between first and second bobbins. There is no such features in the drawings and is not supported by disclosure. The best applicant discloses "the secondary winding includes second winding 91 and third winding 92" [page 10, lines 21-22]. The examiner would assume the third winding should be disposed on the second bobbin as second winding 91.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. [3947749] in view of Wantanabe [JP 08236362A].

Kimura discloses a coupling core 12; a first winding 2 around the core; a first bobbin 10 disposed between the first winding and the core; a plurality of second windings 41,42,43,

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separated from each other by separators disposed around exterior of the second bobbin 11, independent of each other and respectively winding around the exterior of the first winding 2, a second bobbin 11 disposed between the first winding and second winding [figure 6].

Kimura discloses the claimed invention except for magnetic core being iron core.

Wantanabe , however discloses the iron core 33,34 inserted into bobbins 16,22 [figure 1; abstract].

Because Kimura and Wantanabe are both from the same field of endeavor, the application of iron into magnetic core as disclosed by Wantanabe would have been recognized as pertinent art of Kimura.

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct the apparatus as disclosed by Kimura with iron core as disclosed by Wantanabe for the purpose of providing alternate embodiment of the magnetic properties.

With respect to limitation "the second windings have the same winding number", as disclosed by applicant in the specification page 8, lines 25-30, "according to Faraday's Law and Lenz's Law, even numbers of secondary windings use the same iron core and have the same winding number, so they have the same magnetic flux and direction. Thereby, current through the secondary winding for output is balanced automatically. It would have been obvious to have the same winding number as taught Faraday and Lenz laws for the reason stated above.

With respect to claim 2, third winding 44 disposed on bobbin 11 [figure 7].

With respect to claim 3, Kimura discloses the primary winding being divided into plurality of winding units to provide 4th winding disposed between first and second bobbin [col 1, lines 55-60].

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3. Claims 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. in view of Watanabe and further in view of Lin et al. [6717372].

Kimura and Watanabe disclose the claimed invention as cited in rejection of claims 1-4.

Kimura and Watanabe do not disclose the first and second voltage signals of the first and second windings respectively.

Lin however, discloses a driving circuit to provide signal on the primary side of the transformer and secondary side to output AC signal which drives a plurality of lamp set Lp1 to Lp6 [figure 6, col 1, lines 58-64].

Because Kimura, Watanabe and Lin are from the same field of endeavor, the application of signal received from the first winding as disclosed by Lin would have been recognized as pertinent art of Kimura in view of Watanabe.

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to arrange the transformer as disclosed by Kimura in view of Watanabe with first voltage signal at the primary side and a second voltage signal generated by secondary winding for driving a plurality of lamp sets as disclosed by Lin to provide multi-lamp driving system which directly control the current balance among lamps [col 1, lines 53-55].

With respect to claims 6, 14, a third winding 44 disposed on bobbin 11 [figure 7].

With respect to claim 7, 15, Kimura discloses the primary winding being divided into plurality of winding units to provide 4th winding disposed between first and second bobbin [col 1, lines 55-60].

With respect to claims 9, 12; the lamps are connected in series [figure 7].

With respect to claims 8, 16; second windings 41,42,43, are separated from each other by separators disposed around exterior of the second bobbin 11 [figure 6].

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With respect to claims 11, 13; the lamps are discharge tube [col 1; lines 6-10].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANH MAI
PRIMARY EXAMINER**